CLAIMS:

1. Method of reconstructing an image of an object from volumetric data of the object, wherein the volumetric data include a plurality of projections corresponding to a plurality of time points, the method comprising the steps of:

estimating a motion of the object;

determining first time points where the motion of the object is minimal on the basis of the estimated motion of the object; and

selecting projections from the plurality of projections on the basis of the first time points; and

reconstructing the image from the projections selected from the plurality of projections.

2. The method of claim 1, wherein the volumetric data correspond to cardiac CT data and one of simultaneously measured electrocardiogram data and photoplethysmographic data; wherein a number of low resolution images corresponding to a heart region are reconstructed; wherein the number of low resolution images correspond to a plurality of phase points of the heart; wherein a plurality of motion fields is determined for estimating the motion of the object; wherein the determination of the plurality of motion fields is performed for the number of low resolution images such that the plurality of motion fields describe the motion of the object between the number of low resolution images;

determining a high resolution map of second time points where the motion of the heart is minimal on the basis of the first time points;

selecting second projections from the plurality of projections on the basis of the second time points; and

reconstructing a high resolution image from the second projections.

3. The method of claim 2, wherein a first number of the first time points is smaller than a second number of the second time points and wherein the second number of second time points is determined from the first time points by interpolation; and wherein the reconstruction of the high resolution image is performed such that a first area of the heart in the high resolution image is determined from first portions of the volumetric data corresponding to a first phase point of the heart, and a second area of the heart in the high resolution image is determined from second portions of the volumetric data corresponding to a second phase point of the heart, the first phase point being different from the second phase point.

4. The method of claim 1, wherein the volumetric data correspond to the coronary artery region and simultaneously measured electrocardiogram data; wherein the image is reconstructed on the basis of an iterative reconstruction optimization; and wherein a plurality of motion fields is determined for estimating the motion of the object.

5. The method of claim 4, wherein the selection of the projections from the plurality of projections corresponds to a setting of a gating window; wherein, on a variation of the gating window, a new image is reconstructed on the basis of the iterative reconstruction optimization in real-time; wherein the new image is displayed on a display such that a real-time optimization is provided.

6. The method of claim 5, wherein the variation of the gating window is based on the first time points such that the gating window is automatically set to time points where there is minimal motion in the object such that the new image is automatically optimized.

7. The method of claim 5, wherein the variation of the gating window is based on an input from a user such that a real-time interactive optimization of the image is provided.

8. The method of claim 4, further comprising the steps of:

performing a sliding reconstruction of the volumetric data;

segmenting the coronary vessel tree from the volumetric data; wherein the determination of the plurality of motion fields is performed such that the plurality of motion fields describes motions of areas of the coronary vessel tree.

9. Image processing device, comprising:

a memory for storing volumetric data, wherein the volumetric data include a plurality of projections corresponding to a plurality of time points; and

an image processor for reconstructing an image of an object from the volumetric data of the object, wherein the image processor is adapted to perform the following operation:

estimating a motion of the object;

determining first time points where the motion of the object is minimal on the basis of the estimated motion of the object; and

selecting projections from the plurality of projections on the basis of the first time points; and

reconstructing the image from the projections selected from the plurality of projections.

10. The image processing device of claim 9, wherein the image processing device is a CT system suitable for cardiac CT; wherein the volumetric data correspond to cardiac CT data and one of simultaneously measured electrocardiogram data and photoplethysmographic data; wherein the image processor is further adapted to perform the following operation:

determining a plurality of motion fields for estimating the motion of the object;

reconstructing a number of low resolution images corresponding to a heart region; wherein the number of low resolution images corresponds to a plurality of phase points of the heart; wherein the determination of the plurality of motion fields is performed for the number of low resolution images such that the plurality of motion fields describes the motion of the object between the number of low resolution images;

determining a high resolution map of second time points where the motion of the heart is minimal on the basis of the first time points;

selecting second projections from the plurality of projections on the basis of the second time points; and

reconstructing a high resolution image from the second projections.

11. The image processing device of claim 9, wherein the image processing device is a multi-slice CT system; wherein the volumetric data correspond to the coronary artery region and simultaneously measured electrocardiogram data; wherein the selection of the projections from the plurality of projections corresponds to a setting of a gating window; wherein, on a variation of the gating window, a new image is reconstructed on the basis of an iterative reconstruction optimization in real-time; and wherein the new image is displayed on a display such that a real-time optimization is provided.

12. Machine readable medium having instructions recorded thereon configured to instruct a computer to perform the following operation:

estimating a motion of the object;

determining first time points where the motion of the object is minimal on the basis of the estimated motion of the object; and

selecting projections from the plurality of projections on the basis of the first time points; and

reconstructing the image from the projections selected from the plurality of projections.

13. The machine readable medium of claim 12, wherein a plurality of motion fields is determined for estimating the motion of the object; wherein the volumetric data correspond to cardiac CT data and one of simultaneously measured electrocardiogram data and photoplethysmographic data; wherein a number of low resolution images corresponding to a heart region are reconstructed; wherein the number of low resolution images corresponds to a plurality of phase points of the heart; wherein the determination of the plurality of motion fields is performed for the number of low resolution images such that the plurality of motion fields describes the motion of the object between the number of low resolution images; wherein the instructions recorded thereon are further configured to instruct the computer to perform the following operation:

determining a high resolution map of second time points where the motion of the heart is minimal on the basis of the first time points;

selecting second projections from the plurality of projections on the basis of the second time points; and

reconstructing a high resolution image from the second projections.

14. The machine readable medium of claim 12, wherein the volumetric data correspond to the coronary artery region and simultaneously measured electrocardiogram data; wherein the selection of the projections from the plurality of projections corresponds to a setting of a gating window; wherein, on a variation of the gating window, a new image is reconstructed on the basis of an iterative reconstruction optimization in real-time; and wherein the new image is displayed on a display such that a real-time optimization is provided.